



**Air Quality**  
**PERMIT TO CONSTRUCT**  
**State of Idaho**  
**Department of Environmental Quality**

**PERMIT NO.:** P-050301  
**FACILITY ID NO.:** 011-00012  
**AQCR:** 61      **CLASS:** A  
**SIC:** 2034      **ZONE:** 12  
**UTM COORDINATE (km):** 387.7, 4784 . 0

**1. PERMITTEE**

Blackfoot Facility of Basic American Foods (BAF), a Division of Basic American, Inc.

**2. PROJECT**

Boilers 1, 2 and 3 (formerly Boilers 8, 6 and 7, respectively)

**3. MAILING ADDRESS**

415 West Collins Rd.

**CITY**

Blackfoot

**STATE**

ID

**ZIP**

83221

**4. FACILITY CONTACT**

Deloris Aguilar

**TITLE**

Plant Environmental Superintendent

**TELEPHONE**

(208) 785-8306

**5. RESPONSIBLE OFFICIAL**

Nelson Rovig

**TITLE**

Director of Idaho Operations

**TELEPHONE**

(208) 785-8300

**6. EXACT PLANT LOCATION**

One Mile West of Blackfoot on Highway 26

**COUNTY**

Bingham

**7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS**

Processed Vegetable Products – Dehydrated

**8. GENERAL CONDITIONS**

This permit is issued according to IDAPA 58.01.01.200, *Rules for the Control of Air Pollution in Idaho*, and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment.

This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes of design or equipment may require DEQ approval pursuant to the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.200, et seq.

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**TONI HARDESTY, DIRECTOR**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

**DATE ISSUED:** Draft – Public Comment

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## Acronyms, Units, and Chemical Nomenclature

Administrator	Administrator of the EPA
AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
Btu	British thermal unit
CEMS	continuous emissions monitoring system
CFR	Code of Federal Regulations
CO	carbon monoxide
COM	continuous opacity monitor
CPMS	continuous parameter monitoring system
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EPA	U.S. Environmental Protection Agency
gr	grain (1 lb = 7,000 grains)
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
lb/hr	pound per hour
MMBtu/hr	million British thermal units per hour
MMscf	million standard cubic feet
NO <sub>x</sub>	nitrogen oxides
NSPS	New Source Performance Standards
PM	particulate matter
PM <sub>10</sub>	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PTC	permit to construct
<i>Rules</i>	<i>Rules for the Control of Air Pollution in Idaho</i>
SIC	Standard Industrial Classification
SO <sub>2</sub>	sulfur dioxide
T/yr or TPY	tons per year
TAP	toxic air pollutant
UTM	Universal Transverse Mercator

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## 1. PERMIT TO CONSTRUCT SCOPE

### *Purpose*

- 1.1 The purpose of this Permit to Construct (PTC) is to provide more flexibility for the allowable type and amount of fuels for Boilers 1 and 2, and to address Consent Order No. E-010007. This includes the modification of Boiler 2 for combustion of residual oil, an increase in the fuel oil sulfur content for Boilers 1 and 2, implementation of New Source Performance Standards (NSPS), and installation of wet scrubbing systems to control emissions of SO<sub>2</sub>, PM/PM<sub>10</sub>, soluble acids and trace metals when firing oil.

The common numbers assigned to boilers at the Blackfoot Plant differ from those listed in previous permits. Table 1.1 shows the revisions in boiler numbering.

**Table 1.1 PREVIOUS AND CURRENT BOILER NAMES**

Previous Designation	Current Designation
Boiler 6	Boiler 2
Boiler 7	Boiler 3
Boiler 8	Boiler 1

- 1.2 This PTC replaces PTC No. P-040300, issued on March 22, 2004, the terms and conditions of which no longer apply.
- 1.3 The following is a chronological history of other permits issued for this facility which are no longer in effect:
- PTC No. P-040300 issued on March 22, 2004
  - PTC No. 011-00012 issued on November 4, 1994 and amended on April 13, 1995

### *Regulated Sources*

- 1.4 Table 1.2 lists all sources regulated in this PTC.

**Table 1.2 SUMMARY OF REGULATED SOURCES**

Permit Section(s)	Source Description	Emissions Control(s)
2-6	<b>Boiler 1 (formerly Boiler 8):</b> Manufacturer/Model: Murray Rated Heat Input: 57 MMBtu/hr Steam Rate: 45,500 lb/hr Fuels: Natural Gas, Distillate and Residual Oils.	Wet Scrubber, Good Combustion Control
2-6	<b>Boiler 2 (formerly Boiler 6):</b> Manufacturer/Model: Johnson “509” Series, Model TF1800 – 3HG250S Rated Heat Input: 75 MMBtu/hr Steam Rate: 62,100 lb/hr Fuels: Natural Gas, Distillate and Residual Oils	Wet Scrubber, Good Combustion Control
2-6	<b>Boiler 3 (formerly Boiler 7):</b> Manufacturer/Model: Springfield Model 52 Rated Heat Input: 39 MMBtu/hr Steam Rate: 30,000 lb/hr Fuels: Natural Gas and low sulfur (0.05 wt%) Distillate Oil	Good Combustion Control

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**2. EMISSION LIMITS****2.1 PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and CO Emissions - Boilers 1, 2, and 3**

Emissions of particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM<sub>10</sub>), sulfur dioxide (SO<sub>2</sub>), oxides of nitrogen (NO<sub>x</sub>), and carbon monoxide (CO) from the exhaust stacks of Boilers 1, 2, and 3 shall not exceed the values listed in Table 1 of the Appendix of this permit.

**2.2 Sulfur Dioxide Emissions - Boiler 2 - NSPS**

In accordance with 40 CFR 60.42c(d), on and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, when oil is combusted in Boiler 2 BAF shall not cause to be discharged into the atmosphere from Boiler 2 any gases that contain SO<sub>2</sub> in excess of 215 ng/J (0.50 lb/million Btu) heat input; or, as an alternative, when oil is combusted in Boiler 2 BAF shall not combust oil in Boiler 2 that contains greater than 0.5 weight percent sulfur.

- 2.2.1 In accordance with 40 CFR 60.42c(g), compliance with the fuel oil sulfur limits and emission limits of this section shall be determined on a 30-day rolling average basis.
- 2.2.2 In accordance with 40 CFR 60.42c(i), the SO<sub>2</sub> emission limits and fuel oil sulfur limits under this section apply at all times, including periods of startup, shutdown, and malfunction.
- 2.2.3 In accordance with 40 CFR 60.42c(j), only the heat input supplied to Boiler 2 from the combustion of oil is counted under this section. No credit is provided for the heat input to Boiler 2 from other fuels or for heat derived from exhaust gases from other sources, such as internal combustion engines and kilns.

**2.3 Visible Emissions - Boiler 2 - NSPS**

On and after the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, BAF shall not cause to be discharged into the atmosphere from Boiler 2 any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period (average) per hour of not more than 27 percent opacity in accordance with 40 CFR 60.43c(c).

- 2.3.1 The opacity standard under 40 CFR 60.43c(c) applies at all times, except during periods of startup, shutdown, or malfunction in accordance with 40 CFR 60.43c(d).

**2.4 SO<sub>2</sub> and Visible Emissions with Merged Exhaust - Boiler 1**

When the exhausts from Boiler 1 and 2 are merged ahead of a single scrubber to comply with Permit Condition 3.5, the exhaust from Boiler 1 shall be subject to the same emissions limits set forth for Boiler 2 in Permit Conditions 2.2 and 2.3, and BAF may install applicable continuous monitoring systems on each effluent or the combined effluent from Boilers 1 and 2 in accordance with 40 CFR 60.13(g).

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**2.5     Visible Emissions - Boilers 1, 2, and 3**

In accordance with IDAPA 58.01.01.625, the permittee shall not discharge any air pollutant to the atmosphere from any boiler exhaust stack for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625.

**2.6     Nickel Emissions - Boilers 1 and 2**

Combined emissions of nickel from the exhaust stacks of Boilers 1 and 2 shall not exceed the value listed in Table 2 of the Appendix of this permit.

**2.7     Fuel Burning Equipment - PM Emissions**

The permittee shall not discharge to the atmosphere from any boiler PM in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas fuel and 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid fuel in accordance with IDAPA 58.01.01.676-677.

**2.8     NO<sub>x</sub> Emissions - Boilers 1, 2, and 3**

The combined emissions of NO<sub>x</sub> from Boiler 1, Boiler 2, and Boiler 3 shall not exceed 198 tons per any consecutive 12-month period.

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### **3. OPERATING REQUIREMENTS**

#### **3.1 Fuel Specifications – Boilers 1, 2, and 3**

Boilers 1 and 2 may burn natural gas, distillate oil, or residual oil. Boiler 3 may burn natural gas fuel as primary fuel and low sulfur distillate oil as secondary fuel.

3.1.2 The sulfur content of fuels burned in the boilers shall not exceed the following amounts:

- Distillate oil burned in Boiler 3 shall not exceed 0.05% sulfur by weight;
- Distillate oil burned in Boiler 1 and Boiler 2 shall not exceed 0.5% sulfur by weight in accordance with IDAPA 58.01.01.728, and;
- Residual oil burned in Boiler 1 and Boiler 2 shall not exceed 1.75% sulfur by weight in accordance with IDAPA 58.01.01.727.

#### **3.2 Annual Operating Schedule – Boiler 3**

- The quantity of natural gas combusted in Boiler 3 shall not exceed 328 million standard cubic feet (MMscf) per year, based on any consecutive 12-month period.
- The quantity of distillate oil combusted in Boiler 3 shall not exceed 393,120 gallons per year, based on any consecutive 12-month period.

#### **3.3 Residual Oil Throughput – Boilers 1 and 2**

The combined quantity of residual oil combusted in Boiler 1 and Boiler 2 shall not exceed 15,384 gallons per day and 4,097,682 gallons per year, based on any consecutive 12-month period.

#### **3.4 Simultaneous Boiler Operation – Boilers 1, 2, and 3**

Whenever residual oil is combusted in Boiler 1 or Boiler 2, the combined quantity of steam produced by all three boilers shall not exceed 80,000 pounds per hour, based on a daily average.

#### **3.5 Wet Scrubbing System – Boilers 1 and 2**

The permittee shall install, maintain and operate a wet scrubbing system to control emissions of SO<sub>2</sub> and PM<sub>10</sub> from Boiler 1 and Boiler 2 as follows:

- 3.5.1 Emissions of SO<sub>2</sub> and PM<sub>10</sub> from Boiler 1 shall be controlled using a wet scrubber when fuel oil is combusted. When Boiler 1 combusts natural gas, wet scrubbing of the Boiler 1 exhaust is not required.
- 5.5.2 Emissions of SO<sub>2</sub> and PM<sub>10</sub> from Boiler 2 shall be controlled using a wet scrubber when fuel oil is combusted. When Boiler 2 combusts natural gas, wet scrubbing of the Boiler 2 exhaust is not required.
- 3.5.3 When Boiler 2 combusts distillate or residual oil, Boiler 2 shall exhaust through the stack that serves Boiler 1. When Boiler 2 combusts natural gas, Boiler 2 may exhaust through its own stack.

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**3.6 Wet Scrubber Operating Parameters – Boilers 1 and 2**

The permittee shall install, calibrate, operate and maintain equipment to measure each of the following operating parameters for the wet scrubbing system. When the wet scrubbing system is required to be operated, each operating parameter shall be maintained within the specifications established in the O&M manual:

- Pressure drop across the scrubber, or DEQ-approved alternative monitoring, for ensuring dispersion and mixing of scrubbing solution with air;
- Scrubbing solution pH; and
- Scrubbing solution flow rate.

**3.7 O & M Manual – Wet Scrubbers**

Within 60 days after startup of the wet scrubbing systems, the permittee shall have developed an O&M manual for the wet scrubbing system, which describes the procedures that will be followed to comply with the PTC General Provisions and the manufacturer specifications for the air pollution control device. At a minimum the following items shall be addressed in the manual:

- The manufacturer's recommended minimum and maximum values, or DEQ-approved alternatives, for each of the following operating parameters: pressure drop, for ensuring dispersion and mixing of the scrubbing solution with the air stream; the scrubbing solution pH; and the scrubbing solution flow rate.
- Inspection checklists for items that will be periodically inspected while the treatment system is operating, including frequency of inspection.
- Inspection checklist for items that will be inspected when the device is taken out of operation and physically opened for inspection (e.g., internal components), including frequency of these internal inspections.
- Periodic planned maintenance for the control devices.

The contents of the O&M manual shall be based on manufacturer's information to the extent practical. When the manufacturer's information is not used (e.g., a DEQ-approved alternative or performance test information is used in lieu of manufacturer information), this shall be explained in the manual. The O&M manual shall remain onsite at all times and shall be made available to DEQ representatives upon request.

**3.8 Annual Boiler Tune-up – Boilers 1, 2, and 3**

The burners in each boiler shall be tuned annually to maintain efficient fuel combustion.

**3.9 Maintenance of Facilities and Air Pollution Control Equipment – Boiler 2 (NSPS)**

At all times, including periods of startup, shutdown, and malfunction, BAF shall, to the extent practicable, maintain and operate Boiler 2 including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions in accordance with 40 CFR 60.11(d).



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#### **4. TESTING, MONITORING, AND RECORDKEEPING REQUIREMENTS**

##### **4.1 General Performance Testing – Boiler 2 - NSPS**

Performance testing conducted for Boiler 2 under 40 CFR Part 60 Subpart Dc shall be performed in accordance with 40 CFR 60 Subpart A, including but not limited to the following requirements under 40 CFR 60.8 and 60.11.

- 4.1.1 Within 60 days after achieving the maximum production rate at which Boiler 2 facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the EPA Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the EPA Administrator a written report of the results of such performance test(s) in accordance with 40 CFR 60.8(a).
- 4.1.2 For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test required in 40 CFR 60.8 except as otherwise provided in 40 CFR 60.11(e)(1).
- 4.1.3 Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in 40 CFR 60 Subpart Dc unless the EPA Administrator provides otherwise in accordance with 40 CFR 60.8(b).
- 4.1.4 Performance tests shall be conducted under such conditions as the EPA Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the EPA Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard in accordance with 40 CFR 60.8(c).

##### **4.2 Compliance and Performance Test Methods and Procedures for SO<sub>2</sub> – Boiler 2 - NSPS**

- 4.2.1 Except as provided in paragraphs 40 CFR 60.44c(g) and (h) and in 60.8(b), performance tests required under 40 CFR 60.8 shall be conducted following the procedures specified in 40 CFR 60.44c(b), (c), (d), and (e), as applicable. Section 60.8(f) does not apply to this section. The 30-day notice required in 40 CFR 60.8(d) applies only to the initial performance test unless otherwise specified by the EPA Administrator in accordance with 40 CFR 60.44c(a).
- 4.2.2 The initial performance test required under 40 CFR 60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the SO<sub>2</sub> emission limits under 40 CFR 60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which Boiler 2 will be operated, but not later than 180 days after the initial startup of the Boiler 2. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions in accordance with 40 CFR 60.44c(b).

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- 4.2.3 After the initial performance test required under paragraph 40 CFR 60.44c(b) and 60.8, compliance with the SO<sub>2</sub> emission limits under 40 CFR 60.42c is based on the average SO<sub>2</sub> emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average SO<sub>2</sub> emission rate is calculated to show compliance with the standard in accordance with 40 CFR 60.44c(c).
- 4.2.4 If only oil is combusted in Boiler 2, the procedures in Method 19 are used to determine the hourly SO<sub>2</sub> emission rate (E<sub>ho</sub>) and the 30-day average SO<sub>2</sub> emission rate (E<sub>ao</sub>). The hourly averages used to compute the 30-day averages are obtained from the continuous emission monitoring system (CEMS). Method 19 shall be used to calculate E<sub>ao</sub> when using daily fuel sampling or Method 6B in accordance with 40 CFR 60.44c(d).
- 4.2.5 In accordance with 40 CFR 60.44c(g), for oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under 40 CFR 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR 60.46c(d)(2).
- 4.2.6 In accordance with 40 CFR 60.44c(j), the owner or operator of an affected facility shall use all valid SO<sub>2</sub> emissions data in calculating E<sub>ho</sub> under 40 CFR 60.44c(d) or (e), as applicable, whether or not the minimum emissions data requirements under 40 CFR 60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating E<sub>ho</sub> pursuant to 40 CFR 60.44c(d) or (e), as applicable.

**4.3 Monitoring, Compliance and Performance Test Methods and Procedures for PM – Boiler 2 - NSPS**

- 4.3.1 In accordance with 40 CFR 60.45c(a), the owner or operator of an affected facility subject to the opacity standards under 40 CFR 60.43c shall conduct an initial performance test as required under 40 CFR 60.8, and shall conduct subsequent performance tests as requested by the EPA Administrator, to determine compliance with the standards using the following procedures and reference methods:
- Method 9 (six-minute average of 24 observations) shall be used for determining the opacity of stack emissions in accordance with 40 CFR 60.45c(a)(8).
- 4.3.2 In accordance with 40 CFR 60.47c(a), the owner or operator of an affected facility combusting residual oil that is subject to the opacity standards under 40 CFR 60.43c shall install, calibrate, maintain, and operate a COMS for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system.
- 4.3.3 In accordance with 40 CFR 60.47c(b), all COMS for measuring opacity shall be operated in accordance with the applicable procedures under Performance Specification 1 (40 CFR Part 60 Appendix B). The span value of the opacity COMS shall be between 60 and 80%.

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**4.4 Emission Monitoring for SO<sub>2</sub> Emissions – Boiler 2 - NSPS**

- 4.4.1 In accordance with 40 CFR 60.46c(a), except as provided in 40 CFR 60.46c(d) and (e), the owner or operator of an affected facility subject to the SO<sub>2</sub> emission limits under 40 CFR 60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO<sub>2</sub> concentrations and either oxygen or carbon dioxide concentrations at the outlet of the SO<sub>2</sub> control device (or the outlet of the steam generating unit if no SO<sub>2</sub> control device is used), and shall record the output of the system. The percent reduction requirements under 40 CFR 60.42c do not apply and BAF is not required to measure SO<sub>2</sub> concentrations and either oxygen or carbon dioxide concentrations at both the inlet and outlet of the SO<sub>2</sub> control device.
- 4.4.2 In accordance with 40 CFR 60.46c(b), the one-hour average SO<sub>2</sub> emission rates measured by a CEMS shall be expressed in ng/J or lb/million Btu heat input and shall be used to calculate the average emission rates under 40 CFR 60.42c. Each one-hour average SO<sub>2</sub> emission rate must be based on at least 30 minutes of operation and include at least two data points representing two 15-minute periods. Hourly SO<sub>2</sub> emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.
- 4.4.3 In accordance with 40 CFR 60.46c(c), the procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the CEMS.
- (1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 (40 CFR Part 60 Appendix B).
  - (2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 (40 CFR Part 60 Appendix F).
  - (3) 40 CFR 60.46c(c)(3) does not apply
  - (4) The span value of the SO<sub>2</sub> CEMS at the outlet from the SO<sub>2</sub> control device (or outlet of the steam generating unit if no SO<sub>2</sub> control device is used) shall be 125% of the maximum estimated hourly potential SO<sub>2</sub> emission rate of the fuel combusted.
- 4.4.4 As an alternative to operating an SO<sub>2</sub> CEMS, fuel sampling may be conducted in accordance with 40 CFR 60.46c(d).
- 4.4.5 In accordance with 40 CFR 60.46c(f), the owner or operator of an affected facility operating a CEMS pursuant to 40 CFR 60.46c(a), or conducting as-fired fuel sampling pursuant to 40 CFR 60.46c(d)(1), shall obtain emission data for at least 75% of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the EPA Administrator.

**4.5 Alternative Opacity and SO<sub>2</sub> Monitoring Procedures – Boiler 2 - NSPS**

After receipt and consideration of a written application, the EPA Administrator may approve alternatives to any monitoring procedures or requirements of 40 CFR Part 60 in accordance with 40 CFR 60.13(i). If approved, provisions of the alternate opacity monitoring plan will replace permit provisions requiring a COMS. A copy of the EPA-approved alternative monitoring plan and the written EPA approval shall be sent to DEQ.

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**4.6 Opacity and SO<sub>2</sub> Monitoring – Boilers 1 and 2**

- 4.6.1 Whenever oil is combusted in Boiler 1, opacity from the Boiler 1 stack shall be monitored by complying with the opacity requirements described in the 40 CFR Part 60 (NSPS) requirements for Boiler 2 as described in Sections 3, 4 and 5 of this permit.
- 4.6.2 Whenever oil is combusted in Boiler 1 or Boiler 2, SO<sub>2</sub> emissions from the Boiler(s) shall be monitored by complying with the SO<sub>2</sub> CEMS or fuel sampling requirements as described in the 40 CFR Part 60 (NSPS) requirements for Boiler 2, as described in Sections 3, 4 and 5 of this permit, for purposes of complying with the Compliance Assurance Monitoring (CAM) exemption requirements under 40 CFR 64.2(b)(1)(vi). Maintaining records of fuel receipts for fuel oil may not be used for this purpose.

**4.7 PM Performance Test – Boiler 1 and Boiler 2**

At least once every five years a PM performance test shall be conducted on the stack of Boiler 1 and Boiler 2, when firing No. 6 fuel oil, to demonstrate compliance with the PM emission limit in Permit Condition 2.7. Each boiler shall be tested while operating alone and each may be tested on a different date so long as each boiler is tested no less than once every 5 years. The test shall be conducted in accordance with the procedures outlined in 40 CFR 60, Appendix A, Method 5, or a DEQ-approved alternative. The performance test shall be performed in accordance with IDAPA 58.01.01.157 and the following requirements:

- The boiler shall be operated at the worst case normal production rate during the performance test. A description of how this requirement was met shall be included in the performance test report.
- Visible emissions shall be observed during each performance test run using the methods specified in IDAPA 58.01.01.625.
- The quantity of fuel oil combusted by the boiler during the test shall be recorded in units of gallons per hour.

**4.8 Initial PM Performance Test – Boiler 2**

Within 60 days of achieving the maximum production rate of Boiler 2 when firing No. 6 fuel oil, but not later than 180 days after issuance of this permit, an initial performance test shall be conducted to measure PM emissions from the stack of Boiler 2, when firing No. 6 fuel oil, to demonstrate compliance with the PM emission limit in Permit Condition 2.7. The test shall be conducted in accordance with the procedures specified in Permit Condition 4.7.

**4.9 NO<sub>x</sub> Performance Test – Boilers 1 and 2**

Within 60 days of achieving the maximum production rate of Boiler 1 and Boiler 2 when firing No. 6 fuel oil, but not later than 180 days after issuance of this permit, and at least once every five years thereafter, performance tests shall be conducted to measure NO<sub>x</sub> emissions from the stacks of Boiler 1 and Boiler 2, when firing No. 6 fuel oil, to demonstrate compliance with the pound per hour NO<sub>x</sub> emission limits in Permit Condition 2.1. Each boiler shall be tested while operating alone and each may be tested on a different date so long as each boiler is tested no less than once every five years. The tests shall be conducted in accordance with the procedures outlined in 40 CFR 60, Appendix A, Method 7E, or a DEQ-approved alternative. Each performance test shall be performed in accordance with IDAPA 58.01.01.157 and the following requirements:

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- The boiler shall be operated at the worst case normal production rate during the performance test. A description of how this requirement was met shall be included in the performance test report.
- Visible emissions shall be observed during each performance test run using the methods specified in IDAPA 58.01.01.625.
- The quantity of fuel oil combusted by the boiler during the test shall be recorded in units of gallons per hour.

**4.10 Record Keeping Requirements – Boiler 2 - NSPS**

- 4.10.1 The owner or operator shall record and maintain records of the amounts of each fuel combusted during each day in accordance with 40 CFR 60.48c(g).
- 4.10.2 All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record in accordance with 40 CFR 60.48c(i).

**4.11 Records of Boiler Tuning – Boilers 1, 2, and 3**

Records shall be maintained of boiler tuning providing the date the tuning was conducted and a description of adjustments made to the burners to improve combustion efficiency.

**4.12 Monitoring of Boiler Operating Parameters**

The following operating data shall be monitored and recorded for Boilers 1, 2, and 3:

- 4.12.1 On a monthly basis, record the quantity of natural gas combusted in Boiler 3 in units of MMscf per month and MMscf per consecutive 12-month period. The annual fuel consumption shall be determined by summing the most recent monthly quantity and the monthly quantities over the previous consecutive 11-month period.
- 4.12.2 On a monthly basis, record the quantity of distillate oil combusted in Boiler 3 in units of gallons per month and gallons per consecutive 12-month period.
- 4.12.3 On a monthly basis, record the combined quantity of residual oil combusted in Boiler 1 and Boiler 2 in units of gallons per month and gallons per consecutive 12-month period.
- 4.12.4 On a daily basis, record the date and the combined quantity of residual oil combusted that day in Boiler 1 and Boiler 2.
- 4.12.5 Each day that residual oil is combusted in Boiler 1 and Boiler 2 at the same time, and Boiler 3 is also operated, record the following: date; total combined pounds of steam produced that day by all three boilers; and the combined average quantity of steam produced by all three boilers in units of pounds per hour, based on a daily average.

**4.13 Fuel Sulfur Content Receipts – Boilers 1, 2, and 3**

For each shipment of fuel oil received, the permittee shall obtain and maintain at the facility fuel receipts from the fuel supplier which demonstrate the oil received complies with the fuel sulfur content limits specified in Permit Condition 3.1.2 and IDAPA 58.01.01.725-728.

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**4.14    40 CFR 60 Subpart A General Provisions – Boiler 2 - NSPS**

The permittee shall comply with the requirements of 40 CFR 60 Subpart A for Boiler 2 including, but not limited to, notification of commencement of construction within 30 days of commencement and notification of actual date of startup postmarked within 15 days of that date.

**4.15    Records Retention**

The permittee shall maintain sufficient records to assure compliance with all of the terms and conditions of this permit. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

**4.16    Wet Scrubber Operating Parameters – Boilers 1 and 2**

The pressure drop, scrubbing solution pH and scrubbing solution flow rate shall be monitored and recorded once each week when the wet scrubbing system is required to be operated. Monitoring records shall be maintained onsite for a period of five years and made available to DEQ representatives upon request.

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## **5. REPORTING REQUIREMENTS**

### **5.1 Notifications and Reporting Requirements – Boiler 2 - NSPS**

5.1.1 In accordance with 40 CFR 60.48c(a), BAF shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by 40 CFR 60.7. This notification shall include:

- (1) The design heat input capacity of Boiler 2 and identification of fuels to be combusted in Boiler 2.
- (2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42c or 60.43c.
- (3) The annual capacity factor at which the owner or operator anticipates operating Boiler 2 based on all fuels fired and based on each individual fuel fired.
- (4) Notification if an emerging technology will be used for controlling SO<sub>2</sub> emissions as described in 40 CFR 60.48c(a)(4).

5.1.2 In accordance with 40 CFR 60.48c(b), the owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits of 40 CFR 60.42c, or the opacity limits of 40 CFR 60.43c, shall submit to the EPA Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in 40 CFR 60 Appendix B.

5.1.3 In accordance with 40 CFR 60.48c(c), the owner or operator of each residual oil-fired affected facility subject to the opacity limits under 40 CFR 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility which occur during the reporting period.

5.1.4 In accordance with 40 CFR 60.48c(d), the owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits or fuel oil sulfur limits under 40 CFR 60.42c shall submit reports to the EPA Administrator.

5.1.5 In accordance with 40 CFR 60.48c(e), the owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits or fuel oil sulfur limits under 40 CFR 60.42c shall keep records and submit reports as required under 40 CFR 60.48c(d), including the following information, as applicable:

- (1) Calendar dates covered in the reporting period.
- (2) Each 30-day average SO<sub>2</sub> emission rate (ng/J or lb/million Btu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
- (3) 40 CFR 60.48c(e)(3) does not apply
- (4) Identification of any steam generating unit operating days for which SO<sub>2</sub> or diluent (oxygen or carbon dioxide) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.

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- (5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which oil was not combusted in the steam generating unit.
- (6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.
- (7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.
- (8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.
- (9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 (40 CFR 60 Appendix B).
- (10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR 60 Appendix F, Procedure 1.

5.1.6 In accordance with 40 CFR 60.48c(j), the reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the EPA Administrator and shall be postmarked by the 30th day following the end of the reporting period.

**5.2 Notifications and Reporting to DEQ – Boilers 1 and 2**

A copy of all reports submitted to EPA for NSPS requirements shall also be submitted to DEQ.

**5.3 Performance Test Reports DEQ – Boilers 1 and 2**

Each performance test report, including the required process data, shall be submitted to DEQ within 60 days of the date on which the performance test is conducted unless specified otherwise in this permit.



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## 6. APPENDIX

### **BASIC AMERICAN FOODS**

**Table 1. CRITERIA EMISSION LIMITS<sup>A</sup> - HOURLY (LB/HR) AND ANNUAL<sup>B, C</sup> (T/YR)**

Source Description	PM <sub>10</sub>		SO <sub>2</sub>		NO <sub>x</sub>		CO	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Boiler 1	2.14	---	16.9	---	23.1	---	4.6	---
Boiler 2	3.59	---	28.4	---	38.8	---	6.1	---
Boiler 3	0.30	---	1.9	---	5.4	---	1.8	---
Combined Emissions from Boilers 1, 2 and 3	---	18.3	---	145	---	198	---	46

<sup>A</sup> As determined by a pollutant specific U.S. EPA reference method, or DEQ approved alternative, or as determined by DEQ's emission estimation methods used in this permit analysis.

<sup>B</sup> As determined by multiplying the actual or allowable (if actual is not available) pound per hour emission rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates.

<sup>C</sup> T/yr is tons of emissions per any consecutive 12-month period

**Table 2. TAP EMISSION LIMITS<sup>A</sup> - DAILY (LB/DAY) AND ANNUAL<sup>B, C</sup> (LB/YR)**

TAP	Limit for Combined Emissions from Boilers 1 and 2
Nickel	240 lb/yr

<sup>A</sup> As determined by a pollutant specific U.S. EPA reference method, or DEQ approved alternative, or as determined by DEQ's emission estimation methods used in this permit analysis.

<sup>B</sup> As determined by multiplying the actual or allowable (if actual is not available) pound per hour emission rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates.

<sup>C</sup> lb/yr is pounds of emissions per any consecutive 12-month period

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**7. PERMIT TO CONSTRUCT GENERAL PROVISIONS**

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the *Rules for the Control of Air Pollution in Idaho*. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the *Rules for the Control of Air Pollution in Idaho*, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.
2. The permittee shall at all times (except as provided in the *Rules for the Control of Air Pollution in Idaho*) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.
3. The permittee shall allow the Director, and/or the authorized representative(s), upon the presentation of credentials:
  - To enter, at reasonable times, upon the premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
  - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and require stack compliance testing in conformance with IDAPA 58.01.01.157 when deemed appropriate by the Director.
4. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
5. The permittee shall notify DEQ, in writing, of the required information for the following events within five working days after occurrence:
  - Initiation of Construction - Date
  - Completion/Cessation of Construction - Date
  - Actual Production Startup - Date
  - Initial Date of Achieving Maximum Production Rate - Production Rate and Date
6. The Director may require the permittee to develop a list of operation and maintenance procedures to be submitted to DEQ. Such list of procedures shall become a part of this permit by reference, and the permittee shall adhere to all of the operation and maintenance procedures contained therein.
7. If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

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All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

8. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
9. In accordance with IDAPA 58.01.01.123, all documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.